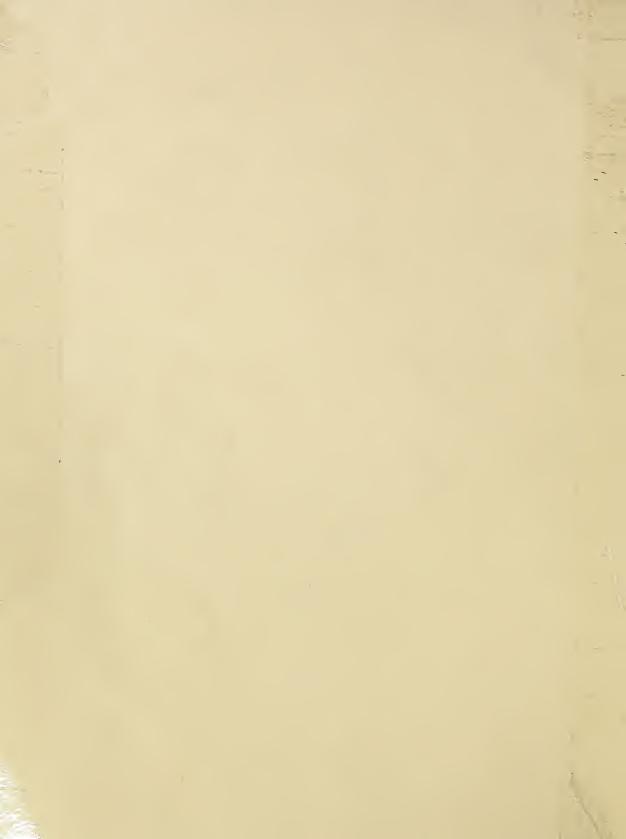
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A281.8 FARM INDEX

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Economic Research Service March 1968 also in this issue: Nutrition in the Field White Poverty in Rural America Kenat: Crop of Promise The Niceties of Rice

Agriculture



WORLD AGRICULTURE: ANNUAL REVIEW AND OUTLOOK

# **ECONOMIC TRENDS**

	UNIT OR '5	'57-'59	'57-'59	1967			1968
ITEM	BASE PERIOD	AVERAGE	YEAR	JANUARY	NOVEMBER	DECEMBER	JANUARY
Prices: Prices received by farmers Crops Livestock and products Prices paid, interest, taxes and wage rates Family living items Production items Parity ratio	1910-14=100 1910-14=100 1910-14=100 1910-14=100 1910-14=100 1910-14=100	242 223 258 293 286 262 83	252 224 276 342 321 287 74	255 255 281 339 319 287 75	250 227 269 343 <b>325</b> 286 73	253 231 272 344 325 287 74	255 232 274 346 327 288 74
Wholesale prices, all commodities Industrial commodities Farm products Processed foods and feeds Consumer price index, all items Food	1957-59 = 100 1957-59 = 100 1957-59 = 100 1957-59 = 100 1957-59 = 100 1957-59 = 100	= = = = = = = = = = = = = = = = = = =	106.1 106.3 99.7 111.7 116.3 115.2	106.2 105.8 102.6 112.8 114.7 114.7	106.2 107.1 96.4 110.9 117.8 115.6	106.8 107.4 98.9 111.5 118.2 116.2	107.1 107.7 99.1 112.1 —
Farm Food Market Basket: 1 Retail cost Farm value Farm-retail spread Farmers' share of retail cost	Dollars Dollars Dollars Percent	983 388 595 39	1,081 413 668 38	1,084 418 666 39	1,080 400 680 37	1,087 408 679 38	=
Farm Income: Volume of farm marketings Cash receipts from farm marketings Crops Livestock and products Realized gross income <sup>2</sup> Farm production expenses <sup>2</sup> Realized net income <sup>2</sup>	1957-59 == 100 Million dollars Million dollars Million dollars Billion dollars Billion dollars Billion dollars Billion dollars	32,247 13,766 18,481 —	124 42,471 18,310 24,161 48.9 34.4 14.5	130 3,595 1,542 2,053 —	168 4,626 2,592 2,034 —	135 3,766 1,862 1,904 48.1 34.2 13.9	3,600 1,600 2,000 —
Agricultural Trade: Agricultural exports Agricultural imports	Million dollars Million dollars	4,105 3,977	6,386 4,4 <b>5</b> 5	532 413	668 380	364 388	=
Land Values: Average value per acre Total value of farm real estate	1957-59=100 Billion dollars	=	4 167 4 182.5	=	<sup>5</sup> 173 <sup>5</sup> 189.5	=	=
Gross National Product: <sup>2</sup> Consumption <sup>2</sup> Investment <sup>2</sup> Government expenditures <sup>2</sup> Net exports <sup>2</sup>	Billion dollars Billion dollars Billion dollars Billion dollads Billion dollars	457.4 294.2 68.0 92.4 2.7	785.0 491.7 112.1 176.3 4.8		=	807.3 501.8 120.8 181.7 3.0	=======================================
Income and Spending: 6 Personal income, annual rate Total retail sales, monthly rate Retail sales of food group, monthly rate	Billion dollars Million dollars Million dollars	365.3 17,098 4,160	626.4 26,117 6,008	610.4 25,687 5,911	642.4 26,411 6,095	649.3 26,402 6,146	651.2 27,176
Employment and Wages: 6 Total civilian employment Agricultural Rate of unemployment Workweek in manufacturing Hourly earnings in manufacturing, un-	Millions Millions Percent Hours	63.9 5.7 5.8 39.8	74.4 3.8 3.8 40.6	74.1 4.0 3.7 41.0	75.0 3.8 3.9 40.8	75.6 4.2 3.7 40.8	75.2 4.0 3.5 40.5
adjusted	Dollars	2.12	2.83	2.78	2.88	2.91	2.93
Industrial Production: 6	1957-59 <del>==</del> 100	-	157	158	160	162	161
Manufacturers' Shipments and Inventories: 6 Total shipments, monthly rate Total inventories, book value end of month Total new orders, monthly rate	Million dollars Million dollars Million dollars	28,745 51,549 28,365	45,201 82,255 45,457	44,460 78,886 43,408	46,405 81,796 46, <b>5</b> 05	48,651 82,255 49,930	Ξ

Average annual quantities of farm food products purchased by urban wage-earner and clerical-worker households (including those of single workers living alone) in 1960-61—estimated monthly.
 Annual rates seasonally adjusted fourth quarter.
 Preliminary.
 As of March 1, 1967.
 Sasonally adjusted fourth quarter.

SOURCES: U.S. Dept. of Agriculture (Farm Income Situation, Marketing and Transportation Situation, Agricultural Prices, Foreign Agricultural Trade and Farm Real Estate Market Developments); U.S. Dept. of Commerce (Current Industrial Reports, Business News Reports, Advance Retail Sales Report and Survey of Current Business); and U.S. Dept. of Labor (The Labor Force and Wholesale Price Index.

# THE AGRICULTURAL OUTLOOK

Farmers' spring planting intentions are now being added to the Nation's statistics.

In the months ahead when crops come in, production from 1 out of 4 harvested acres can be expected to wind up in foreign markets.

Crop output from 70 million acres was exported last year. And that's as much as the combined harvests of Ohio, Indiana, Illinois, Wisconsin, and Minnesota.

As a result, our agricultural trade account for 1967 had about a \$2-billion surplus of exports over imports (\$6.4 billion and \$4.5 billion, respectively). What's ahead for '68?

As in any year, our trade this year will be affected by general world economic conditions. How do they shape up?

#### WORLD ECONOMIC GROWTH AND TRADE

The developed nations of the world as a whole continued to expand their economies in 1967, but not as rapidly as in 1966.

In the industrial countries of the Organization for Economic Cooperation and Development (OECD)—of which the U.S. is a member—real growth (in terms of constant prices) slowed to an estimated 2.5 to 3 percent. It was 4.9 percent the year before. But in 1968, an acceleration to about 4.5 percent is in prospect.

Economic performances of the major industrial countries of the world varied greatly last year.

The economies of Japan and Italy continued to expand at a rapid rate—about 12 percent and 6 percent, respectively.

Among other industrial nations, the U.S., Canada, France, and the U.K. all increased total output, though the rate of increase was less than in 1966.

Only Germany had an actual decline in total output (about 1 percent) rather than just a slower growth rate.

An economic pickup in the OECD countries is forecast for 1968, judging by the accelerating growth rate indicated in the U.S. and Germany toward the end of last year.

In the less developed part of the world, Latin American countries turned in a better economic performance than the OECD industrial nations.

Real gross national product in Latin America rose an estimated 4.5 percent—the same increase as achieved in 1966. Rate of growth in per capita GNP also continued to rise at the 1966 rate—1.6 percent—but was still short of the 2.5-percent Latin American goal.

# How the World Economy Affected International Trade

World trade and commodity prices—of farm products as well as other items—reflected last year's economic slackening in the industrial nations.

Global trade continued to expand, but more slowly. World exports in the first 9 months of 1967 were up 5.1 percent from the same period of 1966. But exports during the latter period had risen 10.3 percent from 1965.

The less developed countries (LDC) have been hardest hit by last year's slowing of the export pace. Preliminary export figures through September 1967 indicate that their exports actually fell off slightly from a year earlier. Thus, all of the world increase in exports during the 9-month period of 1967 was chalked up by the developed nations.

The fall-off in total value of exports by the LDC's no doubt reflected some shifting in volume. But declines in the prices they received for traditional exports were the principal factor.

While the LDC earnings from exports have been falling, prices they must pay for imports have been relatively steady.

Among agricultural commodities, price declines in 1967 were sizable for burlap, coffee, jute, rubber, sisal, tea and wool; and the same held true for some minerals—copper, lead, tin, and zinc among them. On the other hand, prices of cacao, cocoanut oil, copra, and rice tended to rise from 1966.

#### International Reserves

Country holdings of international reserves amounted to \$72.2 billion at the end of the third quarter of 1967. This was 2 percent higher than the comparable 1966 level of \$70.8 billion.

Of these 1967 holdings, the developed countries of the world held \$60.0 billion (83 percent of the total).

However the less developed countries showed a greater increase in reserves, both in total and in percentage terms, than the developed countries.

For the year ended September 30, 1967, the LDC reserves rose \$1.0 billion (18 percent), compared with \$0.5 billion (0.8 percent) for the developed countries.

International trade and financial data for all of 1967 are not yet tallied. It is therefore too soon to calculate the effects of the momentous events that took place in the last quarter of 1967 and early in 1968: the U.K.'s devaluation of the pound sterling; the speculative flight into gold; and the U.S. balance of payments program announced by the President on January 1, 1968.

However, the 1968 outlook for world trade and monetary matters offers reasons for optimism.

The unsettling effects of the persistent U.K. balance of payments problem are now hopefully resolved by devaluation. And the growth rate in several of the world's major economies appears to be picking up again. The world stage thus seems to be set for a trade year better than last.

#### ON THE AGRICULTURAL HOME FRONT

The farmer's share of the food dollar shrank last year—and so did food's share of the consumer's paycheck.

With food prices up only slightly, gains in 1967 take-home pay outpaced the increase in food spending.

Food's share of the budget (income after taxes) dropped to a new low of 17.7 percent, compared with 18.3 percent in 1966. The

farmer's share of the food dollar dropped to 38 cents from 40 cents.

Fewer eggs and more fryers by summer, but too much turkey. This about sums up the poultry outlook.

Growers are replacing fewer layers after last year's 51/2-percent bulge in output, and low prices.

Egg production this spring may drop to the year-earlier pace, and below it as the year wears on. Some pickup in prices is thus in prospect.

Livestock count completed. The Nation's herd of beef cattle at the start of this year numbered just over 86½ million head—1 percent above 1967. Most of the gain in beef animals was in cows and heifers. Calf and bull numbers were up slightly; yearling and older steers were down a bit.

There were only 14.7 million dairy cows—4 percent below last year and the fewest since 1888. And sheep numbers, down 7 percent to 22.1 million, were the smallest since records began over a century ago.

Hogs more than held their own—with the count up about 2 percent to 54 million head.

USDA budget in brief. Proposed outlays for the year beginning July 1, 1968, amount to \$7.2 billion, compared with \$6.7 billion in fiscal 1968 and \$5.8 billion in 1967.

These totals include all expenditures and net lending. They exclude operations of the Farm Credit Administration—an independent agency not included in the USDA budget.

Over two-thirds of USDA spendings and outlays is for programs directly concerned with agriculture and agricultural resources. The balance goes for Food for Freedom, natural resources, and health and welfare activities—such as the school lunch, food stamp, and special programs.

Food for Freedom expenditures are expected to rise slightly to about \$1.4 billion in 1969. About two-thirds of this would be spent under sales agreements and the rest under donation programs. Legislation will be proposed to extend the Food for Freedom program (Public Law 480) when it expires December 31, 1968.

## NUTRITION IN THE FIELD



While farmers nourish their crops with over 3,000 grades of chemical fertilizers, mounting sales of plant nutrients invite a look at the industry's supplies.

America's farmers are reaping ever-bigger harvests with steadily increasing yields. At the same time, they're using more and more fertilizer.

Farmers spent nearly \$1.8 billion in 1966 for about 34 million tons of chemical fertilizers offered in close to 3,300 different grades.

These sales represented a 57-

percent increase from only a decade earlier in the volume of gross fertilizer tonnage consumed.

The most striking change in the 1956-66 period, however, was a rise of 120 percent in use of fertilizer's primary plant nutrients—nitrogen, phosphorus, and potassium (tagged N, P, and K, respectively).

Total use of these nutrient elements rose to 9.6 million tons in the year ending June 30, 1966. And about 5 million tons went into mixtures alone. These mixtures accounted for 57 percent, or 19.4 million tons, of total tonnage.

By 1980, consumption of plant nutrients is expected to be more than double that in 1966.

What and where are the sources of plant nutrient supplies—not only for U.S. farmers but also for farmers abroad? Will stocks be sufficient to meet the heavier needs and demands? What developments can be expected in the chemical fertilizer industry?

Nitrogen, for which Nature's primary store is the atmosphere, is available to all countries that have a facility for converting it into chemical compounds—notably synthetic ammonia.

North American plants have the capacity to produce an estimated 27 percent of the world's nitrogen supply, and Western Europe 36 percent. U. S. productive capacity for anhydrous amonia was an estimated 17 million tons on January 1, 1968—in sharp contrast to only 7.6 million tons 4 years earlier.

Further expansion of the nitrogenous fertilizer industry will depend largely on how the market reacts to increased supplies in the coming 2 or 3 years. Meanwhile, a goal of industry research is to fix atmospheric nitrogen at even lower unit cost.

Phosphorus is found in all rocks, but concentration usually is too low for economic recovery of the material. Workable reserves have been found in only a few parts of the world. By far the largest known deposits are in North Africa, followed by those in the U.S. and the USSR.

About 80 percent of U.S. phosphate ore is mined in Florida. Around 40 percent of total U.S. phosphate rock production is exported. Imports are small.

Development of North Carolina phosphate rock fields, along with operations in Florida and the Western States assures an ample domestic supply of phosphate rock for some time.

However, supplies of sulfur—widely used as sulfuric acid with phosphate rock in fertilizer manufacture—are limited. Though new domestic deposits are being sought, they are slow to come into production.

Sulfur supplies are now extremely tight. Domestic consumption has been outpacing production since 1962, and prices have been rising. With the rising prices, some manufacturers may shift to another ingredient. Nitric phosphates, made with nitric acid, have been turned out successfully in Europe for many years. And U.S. processors of fertilizer ingredients may find it necessary to follow suit.

Potassium occurs in over 50 chemical compounds—in rocks and in water solutions (brines).

Developed world reserves are large. Except for Chilean potassium nitrate deposits, they are practically all in the Northern Hemisphere.

New, deep Canadian potash mines in Saskatchewan are believed the richest in the world—an estimated 70 to 100 times bigger than U.S. reserves which are mainly in the Carlsbad, New Mexico, area.

The U.S. has been, and continues to be, a large importer of potash from Europe—and more recently from Canada. These imports will increase in volume, especially from our neighbor to the north.

Looking ahead at fertilizer prospects in general, the following trends are indicated:

—A continued rise in quality as well as demand.

—More ways of including carriers of micro and secondary nutrients along with the primary elements.

—Increasing use of bulk-blended and liquid fertilizers.

—Stepped-up granulation of solid fertilizers to around the 90 percent level in about 5 years.

—More competitive emphasis on product condition, prices, and services (because the products of different manufacturers are close substitutes within most class and grade categories of plant nutrients).

—Shortening of distribution channels, as some basic producers will tend to deal directly with users through company-owned outlets.

And what about prices?

In contrast to most of a farmer's other inputs from industrial sources, fertilizer prices have been relatively low to date. And as new technology continues to stimulate a sharp expansion in output, the fertilizer industry is likely to maintain its moderate pricing policy. (1)

## Right Machine Used in Time Can Pull A Rice Grower Out of Economic Hole

No one knows any better than a rice farmer in Arkansas how wayward weather can thwart the best of planting plans.

Final seedbed preparation, planting, and construction of levees are among the operations farmers in the Grand Prairie area consider most critical.

Any holdups in these activities are likely to reduce output for the year; and cumulated over a period of years, they can cause the area's economy to deteriorate.

One way farmers can reduce this risk is to build up their equipment inventory so that work can be done more quickly when weather permits. And that's why there has been a marked trend in recent years toward larger power units and associated machinery used in the Arkansas rice fields.

Farmers who plan to invest in new equipment that will enable them to cope better with the vagaries of weather may profit from the following findings of a study of the area made by the Economic Research Service, in cooperation with the University of Arkansas.

The best time for planting rice in the area is April 17 to May 15, judging from historical data and current practice.

Nato rice can be planted after mid-May because it matures faster than the predominant Bluebonnet variety; but adherence to the April 17-May 15 planting period avoids conflict with land preparation and planting operations for soybeans. It also tends to spread the rice harvesting period in the fall if both late and early maturing varieties are planted during the same period.

Weather records indicate that in 2 out of 10 years farmers can expect 10 suitable days or less of field time for rice planting, and the other 8 years they can expect more than 10 days for the work.

Tractor and machinery performance: To determine the most advantageous equipment, a farmer should consider the number of acres to be planted, equipment capacity, expected weather, and how much he would lose if yields were cut by late planting.

Farmer A and Farmer B, for example, each have 200 acres or less of rice. Farmer A has a \$46,000 tractor and machinery unit, and Farmer B has a larger \$63,000 unit. Both of them will probably get their rice planted 97 percent of the time within the desirable period, even though it takes Farmer A about a day's more work.

But, as plantings increase from 200 acres up to 350 acres, Farmer A's chances of falling behind in his planting increase proportionately more than those of Farmer B, as do the number of days required to do the job. (2)

## Insurance Is Strongest Shield Against Hailstones, Judging by Farm Coverage

Some 500,000 of America's 3 million farms hold one thing in common: Special hail insurance.

And the number of hail insurance policies on crops runs even more than half a million because more than one policy per farm is often written when both landlord and operator have a financial interest in the crop.

In States like Illinois, North Carolina, and North Dakota—where big cash crops are prone to hail damage—over half the growers insure against it.

Hail insurance on growing crops in 1966 reached a new high of over \$3.1 billion—about 2 percent more than in 1965.

Growers now take out about \$1 billion more in hail insurance than they did a decade ago, and \$2.2 billion more than 20 years ago. The weather hasn't changed,

but costs of growing most crops have risen, as has the value of harvests.

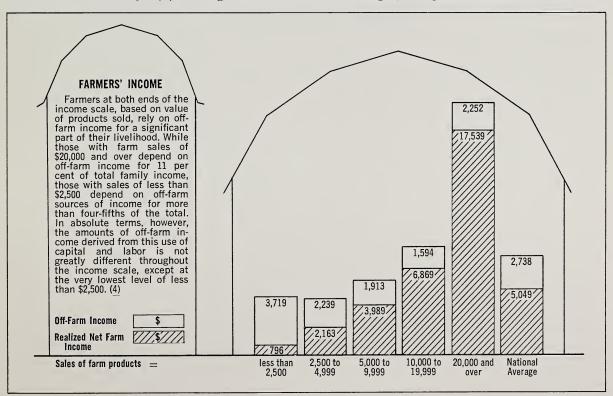
Cash receipts from the sale of crops rose from \$11 billion in 1946 to \$18.4 billion in 1966—an increase of 67 percent.

Rises in cash income from crops frequently insured against hail were 7 percent for cotton; 25 percent, tobacco; 33 percent, food grains; 147 percent, feed crops; and 300 percent for oilbearing crops. The 1966 corn and soybean harvests were valued at \$5.3 billion and \$2.6 billion.

Rises in both costs and receipts are even higher for individual farm operators because of the trend toward fewer and larger farms.

Typical cash grains farms in the Corn Belt, for example, increased in size from 221 to 308 acres, with substantial expansion in both corn and soybeans.

The heaviest concentration of crop-hail insurance is in the Corn



Belt. It accounts for about 55 percent of total U.S. hail coverage.

Countrywide, the incidence of hailstorms and resultant losses fluctuates widely from year to year; and 1966 was a relatively hail-free year. For their total payments of \$113.7 million in premiums, growers collected indemnities of \$54.6 million—25 percent less than in 1965 and the lowest loss ratio since 1959.

In addition to payments made by special crop-hail companies, \$4.6 million was paid out for hail damage by the Federal Crop Insurance Corporation, whose all-risk insurance protects against hail and other hazards. Federal crop insurance coverage totaled \$636 million in 1966. (3)

## Production of Sweetpotatoes Swings, Though Growers Pare Down Acreage

Agronomical arithmetic: fewer acres + high yields = more output.

Sweetpotato growers in almost all producing States reduced their acreage last year.

Cool temperatures delayed growth in most areas, but ample rainfall served to boost yields high above 1966 levels and offset the effects of reduced acreage

Total U.S. sweetpotato production in 1967 reached 14 million hundredweight.

Increase in output centered in Louisiana and North Carolina where production was up by 10 percent. Alabama production was up 7 percent, New Jersey and Georgia up 6 percent, and Texas up 4 percent.

On the other hand, California, Virginia, and Tennessee harvests were off from year-earlier levels.

Although production in 1967 was larger than in 1966, it remained below the 1961–65 average. Prices to growers are expected to continue strong, probably averaging close to last year's record highs. (14)

## Economic Compass Points Toward '68 As Year To Grow More Castorbeans

A step-up in U. S. production of castorbeans—source of industrially important castor oil—is now in prospect after a longtime decline.

Farmers are expected to increase their plantings for several reasons:

—Prices for last year's crop were favorable at about 6 cents a pound (clean seed basis), compared with a 5-cent price reported by the trade for the 1966 crop.

(Farmers grow castorbeans under contract with oil processors who guarantee a minimum purchase price and aid with production and harvesting arrangements.)

—Yields in 1967 were relatively high. In the major growing area of the Southwest, the yield was about 1 ton of beans per acre. It may be even higher this year with commercial introduction of a new dwarf-internode hybrid seed.

—In 1968, for the first time since 1954, there is a price support program for castorbeans.

The government support level is tentatively fixed at 5½ cents per pound under the limited program announced January 22. When the USDA determines a parity price the final support level will be set.

—Changes in the 1968 upland cotton program may encourage some diversion to castorbeans.

A cotton payment rate of 6 cents per pound has been set for voluntary diversion of cotton acreage above the minimum required for program participation. Farmers who divert cottonland to castorbeans will get a diversion payment of 50 percent (3 cents per pound of cotton).

If the above incentives boost castorbean output as expected, the U. S. could supply more of its own increasing needs for castor oil and its derivatives.

One derivative of castor oil is sebacic acid, an important ingredient used in the manufacture of synthetic lubricants for jet aircraft and industrial plastics.

We are the world's largest user of castor oil—about 150 million pounds a year. But our castorbean production plummeted from 64 million pounds in 1963 to an estimated 30 million pounds last year.

It takes 2 pounds of beans to make about 1 pound of oil. Thus, 1967's beam harvest provided only about 10 percent of our national castor oil needs, compared with 24 percent in 1963. Imports—mostly from Brazil and Japan—and sales from government stocks made up the balance. (15)

## Citrus Crop This Season Drops Far Below Supersize Level of Last Year

Citrus production during the 1967/68 season is expected to be down about 30 percent from the record output of last year.

Unfavorable weather in Florida, California, and Texas during 1967 was largely responsible for the reduced prospects.

The U.S. orange crop this season, according to February 1 estimates, is about a third smaller than last year's supersize crop. However, it is still 6 percent bigger than average.

February 1 estimates for other citrus fruits indicate:

—Grapefruit crop down about a fourth from a year ago. Only in Arizona is there a gain.

—Tangerine production about 44 percent less than in 1966/67. A much smaller crop in Florida is responsible for the drop.

—Lemon output 8 percent lower than last year, due to a smaller crop in California.

—Limes and tangelos are the only items to evade the general reductions. Lime output is up about 64 percent; tangelo output, up 6 percent. (16)

# FINANCIAL CONDITION OF AGRICULTURE 1957-1967

Farm debt has risen more rapidly than debt in manufacturing industries since 1957, but remains smaller relative to asset values than in manufacturing industries. (5)

Industry	Liabilities as a percentage of assets			
	January 1, 1957	January 1, 1967		
Agriculture	10.9	16.9		
All manufacturing	36.1	41.2		
Transportation equipment	46.7	46.9		
Motor vehicles and equipment	38.9	48.5		
Primary iron and steel	32.9	38.6		
Stone, clay, and glass products	28.6	35.2		
Lumber and wood, except furniture	35.5	46.3		
Food and kindred products	37.7	44.2		
Textile mill products	31.8	24.6		
Paper and allied products	32.0	40.4		
Chemical and allied products	31.8	40.0		
Petroleum refining	28.0	31.3		

Source: Federal Trade Commission and Securities and Exchange Commission.

Improvement in farm incomes over the past decade reflects the increase in productive efficiencies on farms, stronger demand for farm products including increased export demand, and improved federal programs. Prices of farmland and other assets have risen as buyers bid strongly for resources to enlarge their farming units, often increasing their debts to do so. (5)

Cash receipts from marketings						1967 '
	Billion dollars	29.7	34.0	37.2	43.2	42.5
Realized net farm income	Billion dollars	10.7	11.7	12.5	16.4	14.5
Gross income per farm	Dollars	7,777	9,601	11,773	15,289	15,415
Net income per farm	Dollars	2,449	2,956	3,497	5,049	4,573
Per capita disposable income of farm						
population	Dollars	927	1,108	1,294	1,717	1,692
Financial assets (Dec. 31) <sup>2</sup>	Billion dollars	18.3	18.0	19.1	21.2	22.0
Non-real estate assets (Dec. 31) <sup>3</sup>	Billion dollars	51.6	54.5	49.8	66.3	67.7
Total assets (Dec. 31)	Billion dollars	185.8	203.9	230.0	269.5	281.2
Total liabilities (Dec. 31)	Billion dollars	20.4	26.2	34.9	45.7	49.9
Proprietors' equities (Dec. 31)	Billion dollars	165.4	177.7	195.1	223.8	231.3
Deposits in country banks 4			İ			
Demand	1947-49 = 100	121	121	131	146	5 147
Time	1947-49 = 100	190	269	417	636	⁵ 678
Value of farm production assets (Jan. 1)						
Per farm	Dollars	31,805	42,465	51,536	67,259	73,120
Per farmworker	Dollars	16,972	21,304	25,673	36,216	41,307
Delinquent farm mortgage loans of two					,	
groups of major lenders (Jan. 1)	Number	21,927	20,778	19,359	16,833	14,866
Foreclosures of farms 6	Number	7,900	5,500	3,800	2,700	2,400

<sup>1</sup> All data for 1967 are preliminary. <sup>2</sup> Includes bank deposits, savings bonds, investments in co-ops. <sup>3</sup> Includes livestock, equipment, crop inventories, household furnishings. <sup>4</sup> Financial assets (shown above) owned by farmers include their time and savings deposits; deposits in country banks are owned by farmers and other rural people. <sup>5</sup> Average of first half of year. <sup>6</sup> Year ending March 1.

March 1968



Four out of five rural families in poverty are white. But their plight is often unnoticed, for they are scattered across the U.S., in affluent as well as poor areas.

Families with net money incomes under \$3,000 a year are, by definition, living in poverty. At last count, about half of America's poor families lived in rural areas. And four out of five of these poor rural families were white.

Poor whites are of many diverse backgrounds. They live on the farm, in the nonfarm open country, and in the small town. As a group, they share a common lack of the economic and social resources which the rest of the Nation enjoys.

ERS researchers recently explored some of the special economic and community circumstances of rural white Americans living in poverty. The researchers delineated four basic poverty situations in which most of these poor live. Each presents special problems to those who seek to alleviate poverty.

Depressed areas where most residents are poor whites. Southern Appalachia, the Ozarks, and the Upper Great Lakes Region are outstanding examples of this white poverty situation.

Isolated from the mainstream of our economy by a lack of roads and other communication facilities, these areas have long been impoverished. What jobs exist are usually centered around declining industries such as mining. And the depletion of natural resources has left much of the manpower unemployed or underemployed.

Poverty has become a way of life for area families—and there is little chance for youth to break the cycle. School facilities are generally poor in quality. Most often the youth who search for jobs in distant cities find themselves ill-equipped in the basic

education and in the work skills required for employment.

Depressed areas where most residents are poor nonwhites. Scattered throughout the East South Central and South Atlantic States are many white poor—who are living in a basically non-white poor community.

Most whites in poverty in these areas live or work on farms, which are too small and too inefficient to return adequate incomes. Typically there are not enough nonfarm jobs—although jobs in light industry or manufacturing have increased. New technology in agriculture has stranded many whites and nonwhites who do not have the skills needed for jobs elsewhere.

Nonwhites more commonly participate in anti-poverty and welfare programs in such areas, even though such programs are designed for all groups.

White youth in the prime working ages have been migrating to northern cities in search of jobs. Left behind is an evergrowing proportion of older poor who are either out of the labor force or beyond the best age for new job training. For these persons, the remainder of their lives almost inescapably will be spent in poverty, unless anti-poverty programs are reoriented.

Relatively affluent white areas with few poor whites. The highly productive, mechanized farming areas of the Midwest and the highly specialized food crop areas of Michigan, Washington, and the central valley of California are outstanding examples of this type of poverty situation.

In these areas, the poor and the affluent are geographically mixed—but there is still little social contact between the two groups.

Few poor whites participate fully in community activities—perhaps because they work irregular or unusual hours, or lack clothes or social attributes or confidence. Their children, too, fail to join into many school ac-

WHERE THEY LIVE: Eighty percent of the poor families living in rural America are white, although the proportion varies State by State. While they all share a common lack of economic and community resources, the rural white poor live in many different types of poverty situations, which are shown in the table below.

In situation 1, most area residents are poor and most of the poor are white. Situation 2 includes areas where white poor are a minority in a relatively affluent white community. In situation 3, most residents are poor but most of the poor are nonwhite. And in situation 4, the area economy ranges from poor to affluent and the poor are racially balanced.

White poor in Alabama, for example, live in three basic poverty situations. Commonly, they are a minority in a nonwhite poor community. Many, however, live in areas where poor whites makes up the population bulk. Others live where the poor are racially balanced. (6)

State	Percentage of poor rural families that are white	Predominant white poverty situations in different areas		
Alabama	65	3, 1, 4		
Alaska	31	_		
Arizona	58	_		
Arkansas	76	1, 3		
California	94	2, 4		
Colorado	99			
Connecticut	99	2, 4		
Delaware	75	2. 4		
Florida	76	3. 4		
Georgia	63	2, 4 2, 4 3, 4 3, 4, 1		
Hawaii	27			
Idaho	98	$\equiv$		
Illinois	98	2 1		
Indiana	99	2, 4		
lowa	100	2, 4		
Kansas	99	2, 4 2, 4 2, 4 2 4, 2		
Kentucky	95	1, 2, 4		
Louisiana	55 55	1, 2, 4 3, 4		
Maine	99	3, 4 2 1		
	77	2, 1		
Maryland		1, 3, 4		
Massachusetts	98	〒.		
Michigan	98	2, 4		
Minnesota	99	2, 1 3, 4		
Mississippi	46	3, 4		
Missouri	97	1, 4, 2, 3		
Montana	92	<del>-</del>		
Nebraska	97	2		
Nevada	88	_		
New Hampshire	100	2		
New Jersey	89	4, 2		
New Mexico	79	_		
New York	97	4, 2		
North Carolina	66	1. 3. 4		
North Dakota	97	2, 4		
Ohio	98	2, 4 2, 4		
Oklahoma	92	4		
Oregon	99	_		
Pennsylvania	99	1, 2, 4		
Rhode Island	97			
South Carolina	44	3, 4, 1		
South Dakota	95	2 1		
Tennessee	88	1 3 4		
Texas	82	3 4 2 1		
Utah	9 <b>4</b>	2, 7, 2, 1		
	100	2, 4 1, 3, 4 3, 4, 2, 1 2 2, 1 3, 1, 4 2 1, 4 2, 1		
Vermont	71	3 1 4		
Virginia Washington	96	3, 1, 4 2		
Washington	96	1 1		
West Virginia	99	2 1		
Wisconsin	95	۷, ۱		
<b>Wyomin</b> g	90			

<sup>\*</sup>Estimates of the type of poverty conditions prevailing in the States as a whole. Because of insufficient data or sparse rural population, some States have no type listed.

tivities. Though they have access to better schools than poor whites in depressed areas, few do substantially better in schooling.

The poverty of the migratory farmworkers, who work on the large farms in these areas, is perhaps the most difficult of all types of white poverty to overcome. Their contact with a community is usually fleeting. They lack sufficient medical and health care. And their children attend school irregularly and infrequently.

Areas where the economy is mixed—and the poor are racially balanced. Hard to pinpoint on a map, examples of this type of white poverty are found in: areas where some farms have modernized and prospered while others have not; areas where the economic base is shifting from agriculture to light industry; and areas surrounding large central cities, or where a suburban fringe extends into a rural farming community.

Representative cases can be found in almost any area of the Nation, particularly in States adjacent to the South as well as in selected areas in the South.

Poor whites in these areas (where the economy ranges from poor to affluent) face some special problems. They are competing for jobs not only with poor nonwhites, but also with not-so-poor residents. Their social and psychological adjustment problems are intensified as a result of greater contact with persons who are better off as well as with poor non-whites. (6)

# ERS Study Probes Pros and Cons of Use-Value Tax on Maryland Farmland

Can good farms near city areas survive if farmland is taxed according to what it will bring on the market?

Many farmers on the urban fringes say no. They say if they are taxed at the going rate of real estate, they will have to sell their holdings because their farm income cannot support such taxes.

In coping with this problem, some States have passed laws that lower the farmer's tax bill by assessing the land on its farm value alone, disregarding its value for subdivisions and other uses.

Maryland was the first State to enact such a use-value law, in 1956. The law pertains to land in agricultural use only. Buildings and other improvements such as fences or ditches are assessed on the same basis as other property.

To see how the law has worked in the past decade, the Economic Research Service made a survey of the eight Maryland counties in the Washington-Baltimore area.

Some of the findings:

—In 1965, the assessments per farm acre in the five counties that surrounded Baltimore averaged from \$68 to \$103 depending on the county; with improvements included, the average rose to a minimum of \$144 and a maximum of \$223.

—In the three counties around Washington, D.C., average assessments for land in agricultural use varied from \$70 to \$87 per acre; improved land was assessed from \$151 to \$163.

—Average sale price per acre around Baltimore ranged from \$390 to \$1,033 depending on the county; around Washington it ranged from \$398 to \$1,689. However, land nearest to Washington averaged \$2,735 per acre.

—If use-value assessment had not been employed in 1965, the eight counties covered by the study could have collected—at current real estate tax rates—from approximately \$172,000 more revenue in Frederick County to \$2.3 million more revenue in Montgomery County.

—Estimated tax savings in 1965 by owners of farmland in the eight counties ranged from 60 cents to \$15.20 per acre. (7)

## Land Ownership Changes Hindering Development in Appalachian Areas

Landowning patterns in depressed Appalachia inhibit best use of economic opportunities.

At least this is the indication given in a recent study of rural landownership and economic development in one area. The study concentrates on Alleghany and Bath Countries, Va., and Greenbrier County, W. Va.

—Employment from 1950 to 1960 declined more than 11 percent—with biggest losses in agriculture, forestry, and mining.

—Population during the same period dropped 8 percent—mostly in the 18- to 45-year-old groups from rural areas. And the number of farms decreased by 35 percent.

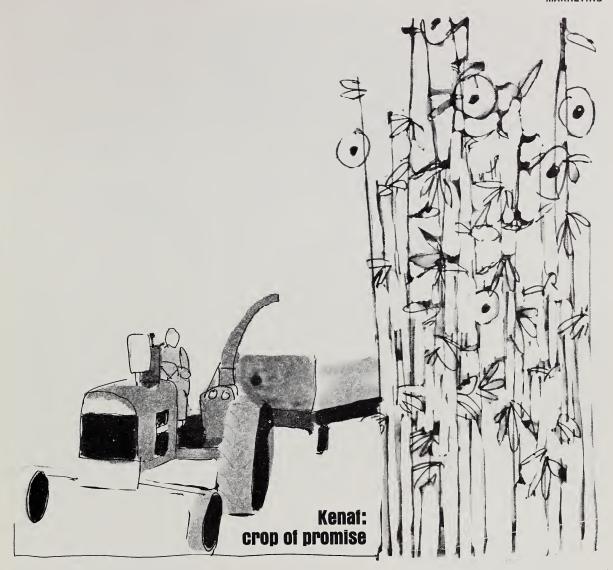
On the plus side, manufacturing and employment were maintained at the same level through the 1950's—even though some industries moved out. But median family income increased.

A big obstacle to development was the drastic change in land-ownership. Sixty percent of the land in units of 140 to 220 acres in 1950 had moved into different size categories by 1962.

The number of units with less than 50 acres increased over this same time from 172 to 273, thus helping to create a pattern of many small, widely scattered ownership units.

The results: Low county tax per unit (with an annual tax of only 25 cents on some units); a tendency to hold the land without applying forest management practices; and dispersed occupancy, which meant heavy per capita costs for schools, roads, and other public services.

The study suggests that with planned development of streets and highways, proper management of forested areas, and establishment of various controls for land use, some improvement would be a reasonable hope. (8)



Fiber from fast-maturing member of hibiscus family may prove to be a practical supplement to dwindling supply of pulpwood from Southern forest reserves.

"Timber!"

The call that resounds through the Southern pines is echoed by a mountain of paper products that's getting higher every day.

The Nation relies on 12 Southern States for over 60 percent of the pulpwood that goes into millions of paper items ranging from greeting cards to milk cartons.

At the rate timber is being felled in the South, it's estimated that the volume cut in 1990 will be equal to timber growth; and by the year 2000, demand will greatly exceed supply unless forest management is intensified. Industry is thus on the lookout for other raw materials to supplement pulpwood supplies.

Kenaf holds promise as one alternative.

What's kenaf? It is an annual plant—a fibrous member of the hibiscus family—that matures in 120–180 days.

Pulp yields from kenaf are comparable to yields from most species of pulpwood, judging by studies at USDA's Northern Regional Research Laboratory.

Qualitywise, kenaf pulps appear to have properties more desirable than hardwood pulps for many kinds of paper and suitable for many paper products now made from softwood pulps.

How about the economic feasibility of growing kenaf as a pulp raw material?

Costs of producing and harvesting kenaf on both family-sized farms and larger scale operations have been estimated by the Economic Research Service for 10 distinct farming areas. These areas—including three in Texas—represent various conditions found in the South.

These costs, computed on a delivered-to-mill basis, are significantly below average costs for rail-roundwood delivered to mills.

Prices required for kenaf to yield a return per acre comparable to returns from corn, soybeans, and cotton have also been calculated. They indicate that kenaf with a yield of 6 tons or better per acre should be able to compete with corn and soybeans for use of land in most areas, but would be less able to compete with cotton. This as-

sumes a value for kenaf delivered to the mill comparable to woodpulp on a moisture-free basis.

Because kenaf is a bulky seasonal crop, storage and handling costs would probably be higher than for pulpwood.

On the other hand, processing costs (including chemicals and power) might be somewhat lower than for pulpwood—especially in a mill designed specifically for kenaf pulping.

The South might reap a number of benefits if kenaf could be established as a papermaking raw material crop:

—Without displacing present crops, kenaf could be grown on cropland not now fully utilized.

—Establishment of kenaf would permit the pulp and paper industry to expand beyond limits imposed by timber resources.

—Income added by kenaf to the farm community would enhance development prospects. (9)

GOINGS ON AT THE GROCERY STORE. The average American foodstore does a big business in nonfoods, stocking a little bit of everything on its shelves—toys for the tots, records for the teens, magazines for the man or woman of the house. But the hottest selling items are still food products—which generally account for about three-fourths of total store sales.

The table below shows the relative importance of various food and nonfood items in 1966, when total store sales amounted to \$64.7 million. (10)

#### Commodity group Share of total store sales in 1966 Food items Percent Meat, poultry and fish 26.5 Eggs 1.0 Dairy products 6.9 Fruits and vegetables 17.9 9.1 Cereal and bakery products Nonalcoholic beverages 5.1 Other foods1 8.1 Total food 74.6 Nonfood items 4.9 Alcoholic beverages .9 Pet food 3.8 Tobacco 3.1 Health and beauty aids 2.5 Soaps and laundry supplies 1.6 Paper products and foil 2.1 Housewares and household supplies<sup>2</sup> .3 Magazines, books, records 6.2 Other nonfoods Total nonfood

<sup>1</sup> Includes frozen prepared foods, baking needs, candy and chewing gum, desserts, food fats and dressings, jams, jellies and preserves, sugars and sweeteners, and other foods. <sup>2</sup> Includes cooking, kitchen aids and serving utensils and such items as pesticides, waxes, mops, brooms, lightbulbs, and deodorizers.

## Fat Lambs Finished Last and Least; Prices Dropped as Weights Increased

Heavyweights aren't always winners—even in livestock production.

Take a look at the marketing of fed lambs, for instance, and the value of raising heavy lambs—those weighing over 110 pounds.

The value of livestock to the packer, and hence to the farmer-feeder, depends on the value of the retail cuts of meat available.

A recent study by the Economic Research Service, using lamb cut-out data supplied by Texas A&M University, indicates that greater profits do not necessarily follow if lambs are fed to heavier-than-usual weights.

For the past several years, ERS has calculated average weekly prices of retail lamb cuts in a nationwide sampling of chainstores.

Using these prices to value the Texas cut-out data, average retail value per pound was computed for all carcasses falling into the three weight groups generally used for wholesale price reporting—34–45 pounds, 45–55 pounds, and over 55 pounds.

In 1967, the average retail value per pound for lambs in the lightweight group was 74.27 cents; for middleweights, 72.86; and for the heavyweights, only 66.63 cents.

High and low prices within each of the three weight ranges for the same period were 78.16 cents and 69.64 cents for the lighter carcasses; 76.04 and 69.16 for those in the middle range; and 70.13 and 63.21 for those over 55 pounds.

Because sales are generally based on carcass weight rather than yield, the current practice of discounting prices for heavy-weight carcasses will probably continue since retail prices generally trend downward as carcass weight increases. (17)



The past year was one of record production for world agriculture and, even more significantly, a record for the less developed countries which girdle the globe.

Record rice output. Record feed grain output. Record soybean output. Record peanut . . . Record.

Last year was one of relatively abundant agricultural output around the globe, as well as a year of record production for the less developed world.

Per capita farm output in the less developed countries (excluding Communist Asia) increased about 5 to 6 percent in 1967—a recovery equal to or slightly above the recent high of 1964.

Most of the developing countries with large populations—India, Pakistan, Brazil—made substantial gains in production of grain and other foods.

In India, increased use of fertilizer and high-yielding seed varieties, coupled with better water management, played an important role in boosting agricultural output. Indian farmers harvested bumper crops of rice, wheat, sorghum, cotton, and jute last year.

Pakistan produced more rice than ever before. And Brazil's corn crop was record large, rice output near record.

Farmers in many developed countries also reaped bumper crops.

In the United States, wheat, corn, and grain sorghum production surpassed all previous levels.

Wheat output also reached new highs in Western and Eastern Europe. Rice production was record large in Japan. And South Africa harvested exceptionally large crops of corn and grain sorghum.

Weather, for a change, was on the farmer's side in many parts of the less developed world. Growing conditions ranged from good to excellent in the graindeficit countries of West Asia and Latin America and in India, Pakistan, and Mainland China.

The grain-exporting countries of South Africa and France also enjoyed better-than-average growing conditions during 1967.

Canada and Australia, however, were plagued by drought. And weather was not very favorable for grain production in the Soviet Union. Last year's grain harvests in Canada and the USSR were only about average. Harvests in Australia were poor, as a result of the dry weather.

For other agricultural crops, alltime highs were reached last year for world production of soybeans, peanuts, and sunflowerseed. The rapeseed crop was near record. These big harvests should boost world output of edible vegetable oils 5 to 10 percent in 1968.

World production of cotton declined 10 percent in 1966 and remained at that level in 1967.

The trade outlook in 1968. The short-term outlook for world exports of wheat is not as favorable this year as it was in 1966/67, but for feed grains a moderate increase in world commercial trade is expected.

Record crops were harvested in most of the major grainimporting countries, but utilization—especially for feed—continues to rise in Japan and most of Europe. The Soviet Union and Mainland China have taken less grain so far in 1967/68, and India's 1968 requirements, although high, may be less than in 1967.

Japan is likely to increase its grain imports. The increase is expected to be in feed grains. Japan's wheat requirements are about the same as in 1967, but the record Japanese rice harvest spells a reduction in rice imports.

The short term outlook for world exports of rice is more favorable than it is for wheat. Although world output rose to a new high last year, exportable supplies remain relatively small because most of the increase in production occurred in the importing countries.

U.S. exports of soybeans in-

#### The Trade Milieu

—The closing of the Suez Canal.

—Devaluation of the pound sterling.

—Conclusion of the Kennedy Round of GATT negotiations.

These are only a few of the international developments during 1967 which affected or may affect the level and direction of world agricultural trade. Here's how:

Since the closing of the Suez Canal, the countries of East Africa, Asia (except West Asia), and Oceania have had to contend with higher ocean freight costs and delays when shipping to the European market. In some instances, these countries have had to find alternate markets.

The burden of the Canal's closing has been heaviest for East African countries, Pakistan, and India since their trade routes to Europe have been lengthened by a much greater proportion than those of other countries.

However, the impact of the

1967 closing has not been as pronounced as that of 1956 because, in the interval, a great number of freight vessels have been built that are too large to use the Canal.

Also, where bilateral agreements or preferential treatment bind the trade of former Suez users, the cost of alternate trade routes has had only a minor effect on the direction of trade.

The devaluation of the pound sterling by the United Kingdom—the world's largest importer of agricultural products—is bound to curtail imports to some extent.

Pressures for import savings and compensation for increased farm costs of imported inputs are expected to stimulate increased U.K. self-sufficiency in output of feed concentrates and meat.

In the reduced U.K. market, the products of certain countries will gain a competitive advantage. The greatest advantage would appear to be enjoyed by the livestock products of Denmark, Ireland, and New Zealand.

These countries have special

trade agreements with Britain and they have also devalued their currency.

Of more specific interest to U.S. exporters, no major suppliers of feed grain, wheat, oilseeds and products, cotton, fruit (other than citrus), and lard have devalued. However, pressure for import savings on corn and sorghums may encourage increased U.K. production of wheat for feed.

As a result of the Kennedy Round of GATT negotiations, the United States received trade concessions affecting exported agricultural commodities valued at \$866 million (c.i.f., 1964, the base year for negotiations).

In turn, we granted concessions affecting imported agricultural products valued at \$860 million (c.i.f.). Most of these concessions are to be phased over a 4-year period.

Soybeans, tallow, variety meats, tobacco, and processed fruits are the major U.S. commodities affected by the trade concessions. (19)

creased in 1966/67 (for the sixth successive year) and are expected to continue at a high level in 1967/68.

Larger sales of U.S. soybeans to Western Europe are expected to compensate for a leveling off of our exports to Japan. U.S. oilseeds are likely to face increased competition in Japan from Chinese soybeans, Soviet sunflowerseed, and Canadian rapeseed.

U.S. cotton exports, following a large increase in 1966/67, got off to a slow start in 1967/68. However, some recovery is expected in the remainder of the year because export availabilities are low for the second consecutive year in Mexico, the United Arab Republic, Brazil and Central America. And import requirements of India and Europe are expected to increase. On the other hand, export availabilities are large in Turkey and Pakistan, and Japan's imports of cotton are expected to decline. (18)

#### Wheat Wave

Turkey—along with other developing nations—is acquainting itself with new varieties of old crops as a step on the road of economic self-help.

Trial plantings of new wheat varieties have yielded so well in Turkey that some Turkish authorities expect the nation to be self-sufficient in wheat within a

few years.
Sonora, the "Mexican wonder wheat," has shown best results in Turkey. It's a high-yielding, semidwarf variety developed in Mexico during the past 5 years by U. S. scientists on the Rockefeller Foundation staff, and collaborating Mexican scientists.

About 20,000 tons of seed of improved varieties of wheat, mostly Sonora, have been imported from Mexico and the U.S. for planting this year.

Good weather has favored Turkey's 1966 and 1967 wheat harvests, and they have been large enough to cover domestic needs. But in most years, Turkey has had to import wheat. (11)

## U.S. Farm Imports in 1967 Register Slight Drop From Year-Earlier Level

The U.S. agricultural import bill last year totaled \$4,455 million—down about 1 percent from \$4,492 million in 1966.

Supplementary products (those that are partially competitive with our own) made up about \$2,699 million—or about 60 percent of last year's total. Following a long term trend, our supplementary imports were up in value from a year earlier by about 3 percent.

Big gains occurred in our meat purchases abroad last year. Major factors were the generally strong demand and reduced domestic supply for certain types of beef.

Beef and veal imports rose to 1 billion pounds in 1967 from 979 million pounds in 1966. Pork imports, at 304 million pounds, were moderately higher, while fresh mutton and lamb purchases slackened off a bit.

Meat imports covered by Public Law 88-482 were 895 million pounds, 10 million pounds below the 1967 base quota of 905 million pounds, and 100 million pounds below the amount required to "trigger" quotas. The law covers imports of fresh, chilled, or frozen cattle meat, and meat of goats and sheep other than lamb.

The rise in meat imports partially offset reductions in other animal products. U.S. imports of dairy products last year dropped 8 percent in value from 1966. And the value of imported hides and skins and apparel wool was down about 35 percent each.

For other supplementary imports, the following gains in value were recorded over 1966: raw cotton, up 56 percent; vegetables and preparations, 20 percent; sugar, 17 percent; wines, 13 percent; grains and preparations, 7 percent; fruits, 6 percent; and tobacco, 2 percent.

Our noncompetitive (complementary) farm product imports last year were down about 6 percent in value from 1966. Hard fibers, rubber, silk, and rough wool showed steep reductions as competition from synthetics stiffened.

Value of U.S. carpet wool imports last year dropped 47 percent from the 1966 level. One reason was lower world wool prices. Another was increased use of synthetic fibers in U.S. carpet production, which also cut back rough wool imports.

Smaller declines occurred in the import values of bananas, raw coffee, and spices.

Among the complementary products showing increases in value were: plantains, cocoa and prepared chocolate, crude drugs, tea, and powdered coffee.

The advances were moderate except for powdered coffee. At \$30 million, the value of these imports was nearly triple the 1966 figure. (20)

### The Soviet Story

The year 1967, which marked the 50th anniversary of the October Revolution, was also a year of gains in most sectors of the Soviet Union's economy.

Agriculture alone fell short of the 1967 planned goal, which called for a 4-percent increase over the exceptionally good output of 1966. Gross agricultural output in 1967 reportedly rose a modest 1 percent over 1966.

Agricultural investment programs and material inputs continued to move upward.

The 33.7 million tons of fertilizer (gross weight) made available to farms in 1967 was up 2.7 million tons from the 1966 level.

Deliveries of tractors to farms reportedly rose to 286,000 last year, and were 9,000 above the previous year. Truck deliveries increased to 146,000, compared with 106,000 in 1966.

The Soviets also claimed to have added 7.8 million tons of grain storage capacity in 1967 and to have irrigated an additional 622,000 acres of land. (21)

## JAPAN FACT SHEET

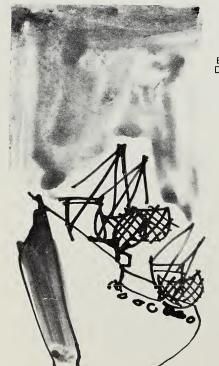
Japan has been the U.S. farmer's top dollar customer abroad since 1961. Agricultural imports from the United States, on a c.i.f. basis, passed the billion dollar mark in 1966—and are still on the rise.

Here are some facts about Japan's economy and trade patterns:

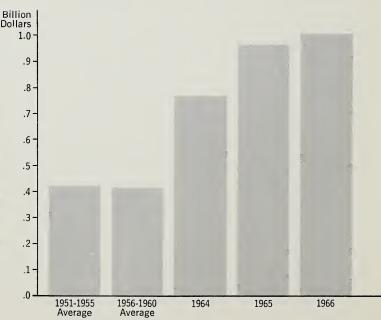
The Japanese economy has grown at an average rate of about 10 percent annually since 1952—making it one of the fastest expanding economies in the world.

A top manufacturing nation, Japan leads the world in shipbuilding and is second in the production of autos (including trucks and buses). It is also a major producer of iron and steel products, transportation equipment, machinery, electronics equipment, precision instruments, chemicals, fertilizers, and textiles.

Limited land resources have hampered the expansion of food production. Agricultural output is therefore not sufficient to meet the needs



#### VALUE OF JAPAN'S FARM IMPORTS FROM THE UNITED STATES



18 The Farm Index

of Japanese consumers or satisfy the demands of Japan's predominantly urban population.

Population has been growing at about 1 percent—or 1 million persons—annually since 1956. This larger population is eating better—2,424 calories per capita in 1965, compared with 2,124 calories in 1955—and expecting higher quality, more nutritious foods.

The traditional rice-fish diet of Japanese is on the wane. Many younger Japanese prefer meat to fish. From 1967 through 1976, the demand for meat, milk, eggs, bread, and fresh green vegetables is expected to rise 50 to 200 percent. Rice consumption is expected to increase only slightly.

Japan relies on exports (primarily of manufactured goods) to finance its imports of food and other farm products. Between 1960 and 1966, the value of merchandise exports has more than doubled, rising from \$4.1 billion to \$9.8 billion. Agricultural imports have climbed from \$1.8 billion to \$3.2 billion during the period.

In 1966, the United States imported nearly \$2.9 billion worth of Japanese products. Our exports to Japan that year totaled close to \$2.3 billion, over two-fifths of which were agricultural products.

The U.S. share of the Japanese farm import market has averaged about one-third in most recent years. During the 1950's, 16 commodities accounted for approximately 90 percent of the total value of Japan's farm imports. The United States in most of these years was the top supplier of eight: nonfat dry milk, wheat, corn, tobacco, hides and skins, soybeans, cotton, and tallow. Since 1960 Japan's imports have become more diversified and the United States is now an important supplier of other commodities such as grain sorghums, rice, alfalfa meal, barley, safflower seed, fresh lemons, almonds, and raisins.

Japan is the top dollar market abroad for many U.S. farm commodities. In 1966, the country took more than one-fourth of our exports of soybeans, cotton, grain sorghums, cattle

U.S.	<b>POSITION</b>	IN	THE	<b>JAPANESE</b>	MARKET	DURING	1966
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Commodity	Value of imports from the U.S.	U.S. position as supplier	U.S. share of total Japanese imports
	Million dollars	Rank	Percent
Soybeans	222	1	82
Corn	153	1	63
Wheat	149	1	53
Grain sorghums	118	1	89
Cotton	110	2	27
Hides and skins	56	1	57
Tobacco	46	1	74
Tallow, beef	40	1	87
Rice	25	3	19
Alfalfa meal	18	1	100
Barley	18	1	58
Lemons	9	1	100
Raisins	5	1	81



hides, and raisins; more than a fifth of our exports of inedible tallow, nonfat dry milk, and fresh lemons. Japan also was our biggest cash customer abroad for baby chicks, sweet shelled almonds, vegetable oil extracts, and natural orange oils.

Nearly every product the United States sells to Japan is at least partly available from another source. The United States faces increasing competition from Canada, Australia, and Argentina in supplying the Japanese wheat market. Mexico, El Salvador, India, and the Soviet Union are keen competitors in cotton. Larger shipments of nonfat dry milk are coming in from New Zealand, Australia, Canada, and some Common Market countries. Thailand, Australia, and Indonesia have the potential to supply large quantities of feed grains.

All imports by Japan require import licenses approved by the Ministry of International Trade and Finance—but import controls are not highly restrictive for most unprocessed agricultural

items. Duties are generally low-to-moderate ad valorem rates based on c.i.f. (cost, insurance, and freight) value in Japan. Import quotas are in effect on some items. Examples are dairy products, cattle and hogs, some citrus fruits, and a large number of processed food products. Government agencies also control imports of tobacco and rice.

To keep and expand its position in the Japanese import market, the United States carries on a variety of market development programs. The latest of these, *American Festival—Food, Fun, and Fashion*, will take place April 5–21. A "solo" U.S. show of food and agricultural products, the exhibition is aimed at making friends with Japanese trade representatives and the public, as well as stimulating sales and promoting future business.

Adding timeliness to the spring event is the fact that 1968 marks Japan's Meiji Centennial, honoring the regime that opened the country to modernization and trade with the West. (12)



## PROJECTIONS OF JAPAN'S AGRICULTURAL REQUIREMENTS, PRODUCTION, AND IMPORT NEEDS IN 1976 1

Commodity	Do	mestic	Import
commounty	Demand	Production	requirements
	1,000	metric tons	1,000 metric tons
Concentrated feeds <sup>2</sup>	18,290	5 <b>,2</b> 34	13,056
Wheat	6,417	865	5,814
Soybeans	<b>3,7</b> 99	147	3,652
Fruits	11,123	8,663	2,460
Barley	<b>2,</b> 599	943	1,656
Milk	10,630	9,029	1,601
Meat	2,318	1,842	476
Rice	14,384	13,952	432
Eggs	1,548	1,496	52

 $^{\rm 1}\,\text{Assuming}$  an 8-percent rise in per capita expenditures.  $^{\rm 2}\,\text{Largely}$  corn and grain sorghum.

From imperial Chinese courts of 5,000 years ago, rice has found its place on the tables of almost every nation. U.S. tastes now lean toward "convenience" forms.

When in Rome, call it *risotto*. In Madrid, try *paella*. In Cairo, make it *pilaf*. But anywhere in the U.S.A., it's rice.

From ancient Asian fields, rice has found its way through the centuries into the menus of al-

most every nationality.

The average American is now eating 7.3 pounds of rice a year—just as he did back in 1909. In the years between, his appetite fell off for a while, and in 1956 he was eating only 5.6 pounds.

It may be only a coincidence, but the lagging American appetite for rice began to pick up at the same time "convenient" forms of rice began appearing on grocers' shelves.

Behind the packaging of today's rice lies a long history of one of man's most versatile foods.

The plant is native to the deltas of Asian rivers—the Yangtze, the Ganges, and the Tigris and Euphrates. Five thousand years ago in China, the ceremonial right to sow rice was reserved for the emperor alone. Today, its cultivation is worldwide—from the handplanted paddy fields of the Orient to the highly mechanized rice farms found in the United States.

Rice was a relatively late arrival in the New World. Historians say it was introduced by accident in the late 17th century when a foreign ship with a cargo of rice was blown off course and landed on the shores of colonial South Carolina.

Late in the 19th century, cultivation spread from South Carolina to Louisiana and Texas and from there to Arkansas and Mississippi. California since has become a leading producer.

Around the world there are at



least 7,000 known varieties of rice. Fortunately for the American consumer he is not confronted with a choice of this magnitude when buying rice.

Here in the U.S., there are only a few varieties. Most of them are natural or controlled hybrids, selected for their adaptability to our soil and climate.

Regular white milled rice—the kind that Grandma used—is still available and preferred by many consumers. It comes in three varieties.

Long grain rice is three or four times as long as it is wide. It is fairly dry and fluffy when cooked. The grains are tender and usually remain separated after cooking. These qualities make long grain white rice ideal as a side dish.

Short and medium grain varieties tend to be moist and sticky when cooked, making them easy to use as ingredients in puddings, pancakes, hot breads.

A little over 10 years ago, parboiled, or converted, rice was introduced on the market. It is treated with a special steam-pressure process before it is milled. Natural vitamins and minerals in the bran coating are forced into the kernel. The process also helps to keep the grains firm and separate during cooking. Unlike milled rice, which will expand to three times its volume during cooking, parboiled rice expands nearly four times.

Perhaps the easiest rice to prepare is precooked rice, which doesn't really have to be cooked at all. It only has to be steamed in boiling water and emerges with a doubling of volume.

Brown rice is the most nutritious variety since only its hull is removed in milling. The bran remaining contains B complex vitamins and minerals. (13)

STRUCTURE OF SIX FARM INPUT INDUSTRIES. Farm Production Economics Division. ERS-357.

No major industry has changed more than farming in the last quarter century. Nearly half of 1966 farm production expenses was for six items—petroleum products, machinery, fertilizer, pesticides, feed, and interest on the farm debt. The volume and quantity of these inputs, and the management services behind them are examined.

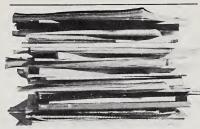
FERTILIZER USE AND TRENDS FOR PRINCIPAL CROPS IN COLORADO. H. C. Stitler and others, Farm Production Economics Division in cooperation with the Colorado Agricultural Experiment Station. Col. Agr. Expt. Sta. Unnumb. Pub. Fertilizer has contributed much to the development of Colorado's highly efficient and productive agriculture. Colorado farmers use approximately 125,000 tons of commercial fertilizer annually at a cost of \$12 million.

FERTILIZER USE ON CROPS AND PASTURES IN ARKANSAS, 1959 AND 1964. T. Mullins, Farm Production Economics Division, and J. R. Ballard, Arkansas Agricultural Experiment Station. Ark. Agr. Expt. Sta. RS-166.

Arkansas farmers recognize the important role of plant nutrients in crop production. This is evidenced by the fact that each year some 60,000 samples of soils are sent to the Arkansas Agricultural Experiment Station's Soil Testing and Research Laboratory for analysis and recommendation of fertilizer.

PROFITABILITY OF PARTICIPATION IN THE 1962 FEED GRAIN PROGRAM IN THE CORN BELT. J. Vermeer, Farm Production Economics Division. ERS-362.

Small changes in prices and yields caused large changes in the proportion of farmers for whom participation in the 1962 Feed Grain Program was profitable.



## RECENT PUBLICATIONS

The publications listed here are issued by the Economic Research Service and cooperatively by the state universities and colleges. Unless otherwise noted, reports listed here and under Sources are published by ERS. Single copies are available free from The Farm Index, OMS, U.S. Department of Agriculture, Washington, D.C. 20250. State publications (descriptions below include name of experiment station or university after title) may be obtained only by writing to the issuing agencies of the respective states.

ALFALFA MEAL IN POULTRY FEEDS . . . AN ECONOMIC EVALUATION USING PARAMETRIC LINEAR PROGRAMING. R. D. Taylor and others. Marketing Economics Division. AER-130.

A method of separating dehydrated alfalfa meal into high-protein leaf meal and low-protein (high fiber) stem meal has been developed. Dehydrated alfalfa meal, "dehy," like many other feedstuffs, contributes a complexity of nutrients, vitamins, and minerals.

STRUCTURAL CHANGES IN THE FEDERALLY INSPECTED MEAT PROCESSING INDUSTRY, 1961-64. W.E. Anthony, Marketing Economics Division. AER-129.

Changes in structure of meat processing firms between 1961 and 1964 accompanied rapid growth of the industry. An increase in livestock production and growing consumer demand gave impetus to this growth.

BEEF CATTLE PRODUCTION TECHNIQUES WHICH MAY HAVE MAJOR ECONOMIC IMPLICATIONS IN THE SOUTH. C. C. Boykin, Farm Production Economics Division, and T.C. Cartwright, Texas A&M University. Texas Agricultural Experiment Station in cooperation with the Economic Research Service. Tex. Agr. Expt. Sta. DIR—16.

Beef cattle production has been rapidly expanding in every region of the country. Individual operators in each region have been, and are continuing to be, faced with decisions concerning beef cattle production patterns and land use. Here major economic implications are examined.

FARM REAL ESTATE MARKET IN NEBRASKA. B. B. Johnson and others, Nebraska Agricultural Experiment Station in cooperation with the Economic Research Service. Neb. Agr. Expt. Sta. SB-495.

Farmers, lending institutions, governmental agencies, and many others have a need for information on land developments.

FINANCING INDUSTRIAL DEVELOP-MENT THROUGH STATE AND LOCAL GOVERNMENTS. T. F. Stinson, Economic Development Division. AER-128.

Attracting new industries is a major goal of many rural communities. Lack of financing for new industrial plants is a major handicap in this process. As a result, a variety of approaches has been developed to provide financing through State and local government programs.

AGRICULTURAL POLICIES IN THE FAR EAST AND OCEANIA. Foreign Regional Analysis Division. FAER-37.

A major economic policy objective of almost every country in the Far East and Oceania is to increase agricultural output. Food products are receiving higher priority.

HEAVY GRAIN EXPORTS IN VOYAGE-CHARTERED SHIPS: RATES AND VOLUME. T. Q. Hutchinson, Marketing Economics Division. MRR-812.

The cost of shipping grain by ocean freight has a marked influence on the competitive position of the United States in world grain markets. Also, differences in rates affect the competitive positions of the various coasts as shipping points, and the interregional competition of the producing areas.

RURAL INDUSTRIALIZATION IN THE OZARKS: CASE STUDY OF A NEW SHIRT PLANT AT GASSVILLE, ARK. M. F. Jordan, Economic Development Division in cooperation with the Arkansas Agricultural Experiment Station. AER-123.

About 13 percent of the increase in total personal income in an eight-county Ozark area is attributable to the launching of one new enterprise.

RURAL LAND OWNERSHIP AND ECONOMIC DEVELOPMENT OF A THREE-COUNTY AREA. A. J. Walrath, Economic Development Division. Virginia Polytechnic Institute in cooperation with the Economic Research Service. Va. Poly. Inst. Bul. 10.

The economy of the threecounty area of Alleghany and Bath Counties, Va., and Greenbrier County, W. Va., has undergone great change since 1950.

### Planning Publications

Rural and urban planning are getting more attention these days—sparked in part by the National Symposium on Communities of Tomorrow, held recently in Washington by the USDA in cooperation with other Federal agencies.

Publications of the Economic Research Service useful to interested readers include:

THE WHY AND HOW OF RURAL ZONING, AIB-196.

COMPREHENSIVE PLANS FOR IMPROVING RURAL COUNTIES. AIB-316.

ANALYSIS OF URBAN AGGLOMERATION . . . AND ITS MEANING FOR RURAL PEOPLE. AER-96.

USE OF AIRPHOTOS FOR RURAL AND URBAN PLANNING. AH-315.

SUMMARY AND EVALUATION OF "PROJECTIONS OF SUPPLY AND DEMAND FOR AGRICULTURAL PRODUCTS IN MEXICO TO 1965, 1970, AND 1975." F. S. Urban, Foreign Regional Analysis Division. ERS-For. 208.

Mexico's sharp rate of growth in agricultural production has more than offset the country's rapid population gains. The population of Mexico was 36 million in 1960 and is projected to increase to 61 million by 1975—an annual rate of 3.6 percent. Projections for total agricultural output indicate a 4-percent rate of increase for 1960–70 and 3.3 percent for 1970–1975.

SILOS, SILAGE HANDLING PRACTICES, AND MINOR FEED PRODUCTS. P. E. Strickler, H. V. Smith, Farm Production Economics Division, and J.R. Kendall, Statistical Reporting Service. Stat. Bul. 415.

Silage from some kind of forage is made in each of the 48 contiguous States. Production is concentrated in areas where dairy farming and livestock feeding are most prevalent. But not all silos are used to store silage in a particular year.

MEASURES OF THE DEGREE AND COST OF ECONOMIC PROTECTION OF AGRICULTURE IN SELECTED COUNTRIES. R. Dardis and E. W. Learn, University of Minnesota in cooperation with the Economic Research Service. Tech. Bul. 1384.

Expansion of agricultural protectionism in many industrially developed countries is one of the main factors affecting world agricultural trade today. The present study examines some of the problems and possible solutions.

SEEDING CROPLAND TO GRASS IN SOUTHWESTERN NORTH DAKOTA.
R. D. Krenz, Farm Production Economics Division, in cooperation with L. W. Schaffner and E. Valdivia, North Dakota Agricultural Experiment Station. N. Dak. Agr. Expt. Sta. Bul. 470.

"Is it profitable to seed cropland to grass and expand livestock?" Read this report.

### Numbers in parentheses at end of stories refer to sources listed below:

1 J. F. Gale, "Fertilizers," The Structure of Six Farm Input Industries, ERS-357 (P); 2. J. B. Hottel, To Reduce Risk Due to Weather. . . Choosing between Different Machinery Combinations for Rice in the Grand Prairie, Ark. Agr. Expt. Sta. Unnumb. Pub. (P\*); 3. L. A. Jones, Crop-Hail Insurance, 1966, Volume, Cost, Indemnities (P); 4. Farm Income Situation, FIS-207 (P); 5. P. Allen (SM); 6. A. R. Bird and J. L. McCoy, White Americans in Rural Poverty, AER-124 (P); 7. P. W. House, Differential Assessment of Farmland Near Cities . . . Experience in Maryland Through 1965, ERS-358 (P); 8. A. J. Walrath, Rural Land Ownership and Economic Development of a Three-County Area, Va. Poly. Inst. Bul. 10 (P\*); 9. W. K. Trotter and R. S. Corkern (SM); 10. H. Eklund, "Grocery Store Sales in 1965-66," National Food Situa., NFS-122 (P); 11. The Africa and West Asia Agricultural Situation, Midyear Review, ERS-For. 199 (P); 12. D. Rahe (SM); 13. Rice Situation,

RS-12 (P); 14. Vegetable Situation, TVS-167 (P); 15. G. W. Kromer, "The U. S. Castor Oil Situation," Fats and Oils Situation, FOS-241 (P); 16. Fruit Situation, TFS-166 (P); 17. R. Crom, "Heavy Lamb Carcasses—Their Retail Value," Livestock and Meat Situa., LMS-159 (P); 18 & 19. Foreign Regional Analysis Division, The World Agricultural Situation: Review of 1967 and Outlook for 1968, FAER-38 (P); 20. Foreign Agricultural Trade, Feb.-Mar. 1968 (P); 21 R. E. Neetz (SM); 22 & 23. L. A. Jones (SM).

Speech (S); published report (P); unpublished manuscript (M); special material (SM); \*State publications may be obtained only by writing to the experiment station or university cited.

OFFICIAL BUSINESS

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#### A Second Chance

Rural oldsters 65 and over who did not sign up for supplementary medical insurance under medicare now have another chance—until April 1, 1968—to enroll.

This is a program that helps pay doctor and medical bills not covered under medicare hospital insurance

More than nine out of 10 people 65 and over already have this coverage.

The cost of those enrolling when they are first eligible will be \$4 a month.

Those who miss out on this second chance will have another one during the first 3 months of next year. But they will have to pay a higher premium. (22)

#### Security, Too

Farmers and rural residents actively working after the age of 65 may now earn more money while collecting a greater share of social security benefits.

In 1968, for the first time, a farmer or older rural worker making up to \$1,680 is entitled to collect all of his social security benefits.

He can earn much more and still collect some benefits. Here's how: If an older farmer works regularly and makes over \$1,680 a year, \$1 will be withheld from his benefits for every \$2 he earns over that annual figure up to \$2,-880. Over that amount, \$1 is deducted for every additional dollar he earns.

As before, those over 72 will have no deductions from benefits, regardless of their earnings. (23)

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